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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	09/383,688
Filing Date	08/26/99
Applicant	Alexander L. Cheng
For	METHOD AND APPARATUS FOR POSITION TRACKING AND COMMUNICATION WITHIN A DEFINED LOCALE
Group Art Unit	2683
Examiner	Sheila Smith

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AMENDMENT "A"

Commissioner of Patents and Trademarks
Washington, DC 20231

Sir/Madam:

In response to Office Action by Examiner Smith dated 10/01/01 regarding the aforementioned patent application, please amend the application as follows:

IN THE ABSTRACT

A method and apparatus is disclosed for position tracking and communication within a defined locale. Low power transmitters and receivers, called probes, are placed in key locations throughout the locale ~~with non-overlapping coverage areas~~, called ranges. The persons or objects to be tracked carry a battery-powered device, called a tag. The battery in the tag can be used to limit the tag's life-span (useful for applications such as limited time span, system renewal according to expected turnover rate, etc.), thereby allowing reuse of the ID. The tag is encoded with a two-level ID code with the common part used in communication with probe in normal condition. The tags respond to beacon upon entering a probe's range. The response is gathered by a probe and fed to a central computer where the tag's current position is recorded and combined with site-specific information and past history to determine the most likely position of each tag. Since the tags do not need to perform any complex computation or high-power communication, they can be constructed inexpensively and deployed as a disposable device. The whereabouts and past information can be queried at various reporting locations. There can also be public announcement, such as speaker or display, placed throughout the locale. The tag can be equipped with some alert or display capability for communication. The present invention provides a low cost, highly usable position tracking system. The system is able to function even with radio signal deafening structure, and provides a site-specific